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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,611	10/14/2003	Frank E. Semersky	1-36691	2924
43935	7590	08/20/2008		
FRASER CLEMENS MARTIN & MILLER LLC				
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PERRYSBURG, OH 43551				
EXAMINER				
VO, HAI				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
08/20/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/684,611

**Applicant(s)**

SEMERSKY, FRANK E.

**Examiner**

Hai Vo

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 22, 26 and 38-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 22, 26 and 38-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The 112 claim rejections, first paragraph are withdrawn in view of the present amendment.
2. The 112 claim rejections, second paragraph are considered moot in view of the cancellation of the claims.
3. The art rejections over WO 98/16364 in view of Collette et al (US 4,923,723) have been withdrawn in view of the present response. However, other art rejections are maintained.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 5, 8-10, 22, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/16364. Clarke (US 6,358,446) will be relied on as an equivalent form of WO 98/16364 for convenience. Clarke teaches a blow molded bottle comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 10, lines 20-27, column 11, lines 45-65, and column 12, lines 25-50). The bottle has a threaded portion formed at its end as shown in figure 1. The foam cells are filled with carbon dioxide (column 3, line 65 et seq.; column 9, lines 55-60). The blow molded bottle comprising two layers is contemplated by the disclosure of Clarke (see figure 1). The bottle comprises a thicker outer foam layer 6 and an inner non-foamed layer

2, 7. The foamed layer and non-foamed layer are made from polypropylene foam material. The foamed layer differs from non-foamed layer in terms of the density. Accordingly, Clarke anticipates the claimed subject matter.

6. Claims 38-40, and 42-48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/16364.

Clarke (US 6,358,446) will be relied on as an equivalent form of WO 98/16364 for convenience. Clarke teaches a preform comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 5, lines 50-65; column 6, lines 1-25; column 10, lines 20-27, column 11, lines 45-65, and column 12, lines 25-50). The blow molded bottle comprising two layers is contemplated by the disclosure of Clarke (see figure 1). The bottle comprises a thicker outer foam layer 6 and an inner non-foamed layer 2, 7. The preform has a threaded portion formed at its end as shown in figure 1. The foam cells are filled with carbon dioxide (column 3, line 65 et seq.; column 9, lines 55-60). The foamed layer and non-foamed layer are made from polypropylene foam material. Clarke does not specifically disclose the fluid being injected in a supercritical state into a single melt of plastic. However, it is a product-by-process limitation not as yet shown to produce a patentably distinct article. It is the examiner's position that the preform of Clarke is identical to or only slightly different than the claimed article prepared by the method of the claim, because both preforms are formed from the same materials, having structural similarity. Even though product-by-process claims are limited by and defined by the process,

determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Clarke. Accordingly, Clarke anticipates or strongly suggests the claimed subject matter.

7. Claims 3, 4, 6, 7, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/16364 as applied to claims 1 and 38 above, and further in view of Hayes (US 6,485,819). Clarke does not specifically disclose the plastic resin made from polyethylene terephthalate. Hayes, however, teaches a blow molded bottle made from an aliphatic-aromatic copolyester (column 13, lines 18-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute a copolyester for polypropylene motivated by the desire to provide a combination of higher biodegradation rate with higher thermal properties.

Clarke does not specifically disclose the use of nitrogen or an inert hydrocarbon gas as a blowing agent. Hayes teaches injection of nitrogen, carbon dioxide or an inert hydrocarbon gas into the polymeric melt to provide the desired foaming action in the melt. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute nitrogen or an inert hydrocarbon gas for carbon dioxide as a blowing agent because nitrogen, carbon dioxide and inert hydrocarbon gases have been shown in the art to be recognized equivalent blowing agents for providing the desired foaming action in the melt.

8. The art rejections based on Clarke have been maintained for the following reasons. Applicant contends that Clarke does not teach a blow molded container with a layer construction forth in the claims. The examiner respectfully disagrees. Clarke teaches a blow molded bottle comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 10, lines 20-27, column 11, lines 45-65, and column 12, lines 25-50). The inner non-foamed layer reads on the claimed inner layer of plastic whereas the an intermediate foam layer reads on Applicant's outer foam layer. Additionally, the blow molded bottle comprising two layers is contemplated by the disclosure of Clarke (see figure 1). The bottle comprises a thicker outer foam layer 6 and an inner non-foamed layer 2, and 7. Accordingly, the art rejections are sustained.

9. Claims 1-5, 8-10, 22, 26, 38-40, 42-49, 51, 52, 54, 55, 57 and 58 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Johnson et al (US 4,872,573). Johnson teaches a bottle cap comprising three layers: an inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 3, lines 45-65). The bottle cap further includes at least one layer of barrier resin such as PET, PAN as shown in figures 4 and 5 (column 7, lines 5-10). The bottle cap has a threaded portion formed at its end as shown in figure 1. The foam concentrate comprises sodium bicarbonate and citric acid (column 4, lines 5-10). Hayes (US 6,485,819) is relied on as evidence to show a state of fact – that is, carbon dioxide gas is released from the interaction of the sodium bicarbonate and citric acid to provide the desired foaming action in the polymeric melt (column 15, lines 60-62, Hayes). Likewise, the foam cells are substantially filled with carbon dioxide. The foamed layer and non-foamed layer are made from polypropylene foam material.

The recitation “perform” or “container” has not given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. **Kropa v. Robie**, 88 USPQ 478 (CCPA 1951).

Johnson does not specifically disclose a blow molding as well as a fluid being injected in a supercritical state into a single melt of plastic. However, they

are product-by-process limitations not as yet shown to produce a patentably distinct article. It is the examiner's position that the bottle cap of Johnson is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Johnson. Accordingly, Johnson anticipates or strongly suggests the claimed subject matter.

10. The art rejections based on Johnson have been maintained for the following reasons. Applicant contends that Johnson does not teach a blow molded container with a layer construction set forth in the claims. The examiner respectfully disagrees. Johnson teaches a bottle cap comprising three layers: an



inner non-foamed layer, an intermediate foam layer and an outer non-foamed layer (column 3, lines 45-65). The inner non-foamed layer reads on the claimed inner layer of plastic whereas the an intermediate foam layer reads on Applicant's outer foam layer. Accordingly, the art rejections are sustained.

11. Claims 38, 40, 42-44 and 49-60 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bland et al (US 5,215,691). Bland teaches a composite foam article by the coextrusion comprising a two layer structure: film/ foam (abstract), and a five layer structure: film/foam/film/foam/film (example 3). The foam cells are filled with carbon dioxide (column 5, line 54-55). The foamed layer and non-foamed layer are made of the same or different materials (column 5, lines 35-45). The recitation "a blow molded container" has not given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951). Bland does not specifically disclose the blow molding and the gas injection in a supercritical state into a single melt of plastic. However, it is a product-by-process limitation not as yet shown to produce a patentably distinct article. It is the examiner's position that the article of Bland is identical to or only slightly different than the claimed article prepared by the method of the claim, because both articles are formed from the same materials, having structural similarity.

Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Bland. Accordingly, Bland anticipates or strongly suggests the claimed subject matter.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bland et al (US 5,215,691) as applied to claim 38 above, and further in view of Boyd et al (US 4,533,578). Bland does not specifically disclose the thermoplastic resin of the film layer made from a polyethylene terephthalate. Boyd, however, discloses a three ply bag comprising a foam layer sandwiches between the skin layers wherein the foam layer and the skin layer formed from polyethylene terephthalate (column 2, lines 20-45, 60-65). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use

polyethylene terephthalate for the foam layer and the film layer of Bland because such is an intended use of the material and Boyd provides necessary details to practice the invention of Bland.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-10, 22, 26, 38-60 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 11/384,979. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '979 patent application fully encompass the claimed subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. The double patenting rejections will not be withdrawn until the submission of the terminal disclaimer.

### ***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on Monday through Thursday, from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hai Vo/

Primary Examiner, Art Unit 1794